

# Work Order ID 114780

March-11-14 4:12:37 PM

**\*114780\***

Page 1

Item ID: D4635-4 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Aft Ceiling Panel, RH  
 Start Date: 12/03/2014 Start Qty: 1.00 **\*1\*** Cust Item ID:  
 Required Date: 12/03/2014 Req'd Qty: 1.00 **\*1\*** Customer:  
 Reference:

Approvals: Process Plan: MLS Date: 14-03-12 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description              | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp                         |
|--------------------------------|---------------------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|--|
| <b>Draw Nbr</b>                | <b>Revision Nbr</b>                   |                      |         |        |              |               |               |                  |  |
| D4635                          | E                                     |                      |         |        |              |               |               |                  |  |
| 100                            |                                       | 0.00                 |         |        |              |               |               |                  | <b>DAS</b><br><b>07</b><br><b>9-89</b> |
| <b>*100*</b>                   | HAND FINISHING THERMOFORMING          |                      |         |        |              |               |               |                  |  |
| Thermoform                     | Memo                                  | 0.00                 |         |        |              |               |               |                  |  |
| Thermoforming Machine          | Cut Blanks                            |                      |         |        |              |               |               |                  | 14/04/03<br>OK 14/04/09                |
| 105                            |                                       | 0.00                 |         |        |              |               |               |                  | <b>DAS</b><br><b>07</b><br><b>9-89</b> |
| <b>*105*</b>                   | Dry Material                          |                      |         |        |              |               |               |                  |  |
| HandThermo                     | Memo                                  | 0.00                 |         |        |              |               |               |                  |  |
| Hand Finishing Thermoforming   | Dry Sheet as per OSI022 POLYCARBONATE |                      |         |        |              |               |               |                  | 14/04/03<br>OK 14/04/09                |
|                                | Temp: <u>245 deg. F</u>               |                      |         |        |              |               |               |                  |  |
|                                | Time IN: <u>5:00 PM</u>               |                      |         |        |              |               |               |                  |  |
|                                | Time OUT: <u>6:00 AM</u>              |                      |         |        |              |               |               |                  |  |
|                                |                                       | APR 03 2014          |         |        |              |               |               |                  |  |
|                                |                                       | Per.....             |         |        |              |               |               |                  |  |
|                                | 245 deg. F                            |                      |         |        |              |               |               |                  |  |
|                                | 5:00 PM                               |                      |         |        |              |               |               |                  |  |
|                                | 6:00 AM                               |                      |         |        |              |               |               |                  |  |
|                                |                                       | APR 29 2014          |         |        |              |               |               |                  |  |
|                                |                                       | Per.....             |         |        |              |               |               |                  |  |

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|  |  |   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|--|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>   | Water Jet <input type="checkbox"/>  | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>   | Prod. Eng. Coord. <input type="checkbox"/>  | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>   | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>   | Supplier <input type="checkbox"/>   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design        |      |      |     |   |                   |                    |             |              |              |
| Doc/Data      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |   |                   |                    |             |              |              |
| Handling/Pre  |      |      |     |   |                   |                    |             |              |              |
| Material      |      |      |     |   |                   |                    |             |              |              |
| Operator      |      |      |     |   |                   |                    |             |              |              |
| Offset/Setup  |      |      |     |   |                   |                    |             |              |              |
| Process       |      |      |     |   |                   |                    |             |              |              |
| Supplier      |      |      |     |   |                   |                    |             |              |              |
| Training      |      |      |     |   |                   |                    |             |              |              |
| Transport     |      |      |     |   |                   |                    |             |              |              |
| Unapproved    |      |      |     |   |                   |                    |             |              |              |

### FAULT CATEGORY

|  |  |   |  |
|--|--|---|--|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><br><input type="checkbox"/> Other |
|--|--|---|--|



DQA:

Date: 14/05/10



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: 14/5/20

Work Order update only ☐

|                           |   |   |                                    |  |                                      |
|---------------------------|---|---|------------------------------------|--|--------------------------------------|
| Work Order: <u>114780</u> | <b>DISPOSITION</b><br>Rework <input type="checkbox"/><br>Scrap <input checked="" type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b>                 |                                    |  |                                      |
| Part No. <u>DY635-4</u>   |   | Skid-tube <input type="checkbox"/>                | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/>           | Engineering <input type="checkbox"/> |
| NCR No. <u>14-3770</u>    |   | Machining <input type="checkbox"/>                | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/>   | Quality <input type="checkbox"/>     |
|                           |   | Thermoforming <input checked="" type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/>       |
|                           |   | Large Fab <input type="checkbox"/>                | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/>            |                                      |

| Root Cause    | Date | Step     | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description                          | Sign & Date    | Verification         | QC Inspector                     |
|---------------|------|----------|-----|---|-------------------|---|----------------|----------------------|----------------------------------|
| Design        |      |          |     |   |                   |   |                |                      |                                  |
| Doc/Data      |      |          |     |   |                   |   |                |                      |                                  |
| Equip/Tooling |      |          |     |   |                   |   |                |                      |                                  |
| Handling/Pre  |      |          |     |   |                   |   |                |                      |                                  |
| Material      |      |          |     |   |                   |   |                |                      |                                  |
| Operator      | X    | 14/04/24 | 140 | A   | DAS 16 9-89       | Scrap + Destroy.<br>Replac. <u>M128/128</u> | Dh<br>14/05/01 | DAS 27 9-89<br>M/S/S | DAS 16 9-89<br>Q2042<br>14/04/24 |
| Offset/Setup  |      |          |     |   | Q2042<br>14/04/24 |   |                |                      |                                  |
| Process       |      |          |     |   |                   |   |                |                      |                                  |
| Supplier      |      |          |     |   |                   |   |                |                      |                                  |
| Training      |      |          |     |   |                   |   |                |                      |                                  |
| Transport     |      |          |     |   |                   |   |                |                      |                                  |
| Unapproved    |      |          |     |   |                   |   |                |                      |                                  |

## FAULT CATEGORY

|  |  |   |   |
|--|--|---|---|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input checked="" type="checkbox"/> Other |
| Parts / tooling was not Rechecked before each use.   |  |   |   |



## Non-Conformance Report

|                 |
|-----------------|
| <b>Reviewed</b> |
| <b>DQA:</b>     |
| <b>Date:</b>    |

Printed on: Thursday, April 24, 2014

|  |   |                               |   |
|--|---|-------------------------------|---|
| <b>Details</b>   |   |                               |   |
| <b>Raised Date</b><br>4/24/2014  | <b>Status</b><br>Open   | <b>Owner</b><br>Forbes, Nigel | <b>Number</b><br>NCR14-3770                 |
| <b>Target Date</b><br>5/16/2014  | <b>Standard</b>   |                               | <b>Severity</b><br>MAJOR                    |
| <b>Process</b><br>Quality Inspection   |   | <b>Audit</b>                  |   |
| <b>Raised By Person</b><br>Downing, Eric M   | <b>Raised Against (Department or Supplier)</b><br>Manufacturing\Thermoforming |                               | <b>Fault Category</b><br>General\Part Moved |
| <b>Details</b><br>found when inspecting D4635-4 B#114676 that the inner ridge (detail L) had moved closer to hole pattern Detail E. after performing a spot inspection on the thermoformed mould it was found that section of the mould was loose and not properly secured to the mould. |   |                               |   |
| <b>Keywords</b>  |   | <b>Product</b><br>D4635-4     |   |
| <b>Document</b>  |   | <b>Root Cause</b>             |   |
| <b>Closed By</b>   | <b>Closed Date</b>  | <b>Resolution</b>             |   |

|                                 |                                 |                    |                  |
|---------------------------------|---------------------------------|--------------------|------------------|
| <b>Corrective Action</b>        |                                 |                    |                  |
| <b>Target Date</b><br>5/16/2014 | <b>Owner</b><br>Downing, Eric M | <b>Closed Date</b> | <b>Closed By</b> |
| <b>Details</b>                  |                                 |                    |                  |

|  |                 |   |                       |
|--|-----------------|---|-----------------------|
| <b>Actions</b>   |                 |   |                       |
| <b>Number</b>  | <b>Owner</b>    | <b>Target Date</b>  | <b>Completed Date</b> |
| <b>Details</b>   |                 | <b>Response</b>   |                       |
| 1  | Downing, Eric M | 4/25/2014   | 4/24/2014             |
| inspect all pannels that have been formed and ensure that they do not have the same issuerecord on quarantine list and attach to NCR |                 | following parts are to be scrapD4635-4 B114781D4635-4 B114780D4635-4 B114779D4635-4 B114676 |                       |
| 2  | Leger, Daryl    | 5/9/2014  |                       |
| update work orders to have at the begging step #100 a note to verify moulds before forming parts                                     |                 |   |                       |

| Verification & Review |       |             |           |
|-----------------------|-------|-------------|-----------|
| Target Date           | Owner | Closed Date | Closed By |
| Details               |       |             |           |

| Actions |       |             |                |
|---------|-------|-------------|----------------|
| Number  | Owner | Target Date | Completed Date |
| Details |       | Response    |                |
|         |       |             |                |
|         |       |             |                |

# Work Order ID 114780

March-11-14 4:12:37 PM

\*114780\*

Page 3

Item ID: D4635-4 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Aft Ceiling Panel, RH  
 Start Date: 12/03/2014 Start Qty: 1.00 \*1\* Cust Item ID:  
 Required Date: 12/03/2014 Req'd Qty: 1.00 \*1\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description                      | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp        |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|-----------------------|
| 150                            | QC5- Inspect part completeness to step on W/O | 0.00                 |         |        |              |               |               |                  |                       |
| *150*                          | QC  | 0.00                 |         |        |              |               |               |                  |                       |
| Quality Control                | Memo <i>nlas</i>                              |                      |         |        |              |               |               |                  |                       |
| 160                            | Packaging                                     | 0.00                 |         |        |              |               |               |                  |                       |
| *160*                          | Packaging                                     | 0.00                 |         |        |              |               |               |                  |                       |
| Packaging                      | Memo <i>MP</i>                                |                      |         |        |              |               |               |                  | <i>① SAO 14/09/01</i> |
| 170                            | QC21- Final Inspection - Work Order Release   | 0.00                 |         |        |              |               |               |                  |                       |
| *170*                          | QC  | 0.00                 |         |        |              |               |               |                  |                       |
| Quality Control                | Memo  |                      |         |        |              |               |               |                  | <i>MLJ 14-05-02</i>   |

*① 14-5-01*

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|  |  |  |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|--|--|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>   | Water Jet <input type="checkbox"/>   | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>   | Prod. Eng. Coord. <input type="checkbox"/>   | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>   | Rec/Store/Packaging <input type="checkbox"/>   | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>   | Supplier <input type="checkbox"/>  |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design        |      |      |     |   |                   |                    |             |              |              |
| Doc/Data      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |   |                   |                    |             |              |              |
| Handling/Pre  |      |      |     |   |                   |                    |             |              |              |
| Material      |      |      |     |   |                   |                    |             |              |              |
| Operator      |      |      |     |   |                   |                    |             |              |              |
| Offset/Setup  |      |      |     |   |                   |                    |             |              |              |
| Process       |      |      |     |   |                   |                    |             |              |              |
| Supplier      |      |      |     |   |                   |                    |             |              |              |
| Training      |      |      |     |   |                   |                    |             |              |              |
| Transport     |      |      |     |   |                   |                    |             |              |              |
| Unapproved    |      |      |     |   |                   |                    |             |              |              |

### FAULT CATEGORY

|  |  |   |   |
|--|--|---|---|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Other<br><br>_____<br>_____<br>_____ |
|--|--|---|---|



# Picklist Print

Page 25

March-11-14 4:15:22 PM

Work Order ID: 114780

\*114780\*

Parent Item: D4635-4

\*D4635-4\*

Parent Item Name: Aft Ceiling Panel, RH

Start Date: 12/03/2014

Required Date: 12/03/2014

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev. A New Issue 12/05/07 DL VERIFIED BY:JLM IPP Rev.  
B Dwg. Update 12/11/08 DL IPP Rev C Dwg.  
Update 13/07/09 DL IPP Rev. D Dwg, Update,  
Material Change 13/12/18 DL

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status            |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|-------------------|
| MLEXS.093-F6006-07              |                        | Purchased     | No          |                     |                  | 100             | sf                 | 840.7600       | 9.39        | 10           |               |                | DAS<br>07<br>9-89 |
| *MI FXS 093-F6006-07*           |                        |               |             |                     |                  |                 |                    |                | **          |              |               |                |                   |
| GE PLASTICS LEXAN SHEET         |                        |               |             |                     |                  |                 |                    |                |             |              |               |                |                   |

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| MAT023   | 840.76  |          |
| 114459   | 229.26  |          |
| 123105   | 38      |          |
| 124501   | 573.5   |          |

128668

20 sq ft

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

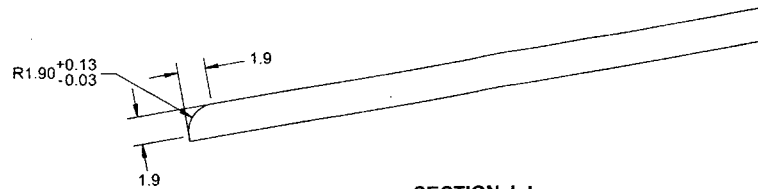
Work Order update only ☐

|  |  |  |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|--|--|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>   | Water Jet <input type="checkbox"/>   | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>   | Prod. Eng. Coord. <input type="checkbox"/>   | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>   | Rec/Store/Packaging <input type="checkbox"/>   | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>   | Supplier <input type="checkbox"/>  |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design        |      |      |     |   |                   |                    |             |              |              |
| Doc/Data      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |   |                   |                    |             |              |              |
| Handling/Pre  |      |      |     |   |                   |                    |             |              |              |
| Material      |      |      |     |   |                   |                    |             |              |              |
| Operator      |      |      |     |   |                   |                    |             |              |              |
| Offset/Setup  |      |      |     |   |                   |                    |             |              |              |
| Process       |      |      |     |   |                   |                    |             |              |              |
| Supplier      |      |      |     |   |                   |                    |             |              |              |
| Training      |      |      |     |   |                   |                    |             |              |              |
| Transport     |      |      |     |   |                   |                    |             |              |              |
| Unapproved    |      |      |     |   |                   |                    |             |              |              |

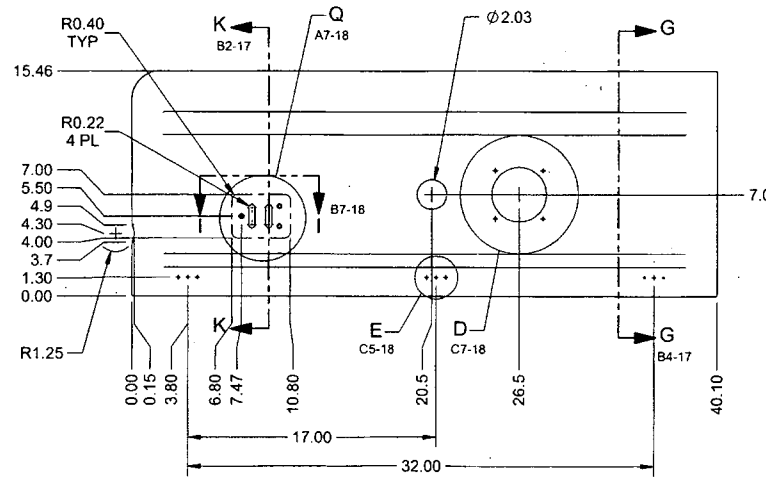
### FAULT CATEGORY

|  |  |   |
|--|--|---|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence |
|  |  | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge  |
|  |  | <input type="checkbox"/> Pressure/Forced Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Other  |



SECTION J-J C2-16

NO. 114780 MLS  
1403-72



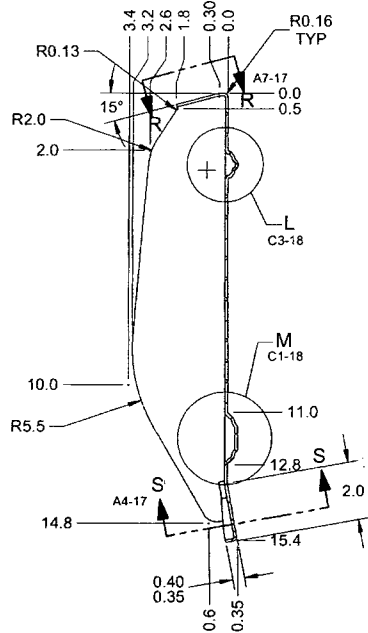
NOTES:

- 1) MATERIAL: F6006 SUEDE/POLISHED GY5B133 LIGHT GREY LEXAN SHEET 0.093 THICK (REF DART SPEC MLEXX.093-F6006-07)
  - 2) FINISH: N/A
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 2.66 lbs
  - 8) TEXTURE ON THIS SIDE
  - 9) TRIM D4635-4 PER TOOL DT9842
  - 10) THERMOFORM D4635-4 PER QSI 022 USING DT9850 TOOL
- MIN. THICKNESS AFTER FORMING:  
RIDGES/EDGES = 0.060  
ELSEWHERE = 0.070

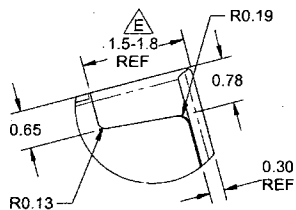
**D4635-4 RH, AFT CEILING PANEL**

RELEASED  
14-01-22

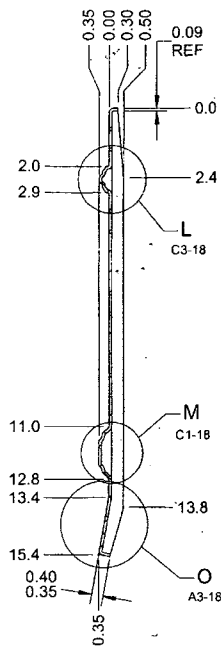
|            |          |  |                |
|------------|----------|--|----------------|
| DESIGN     | RF       | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA   |                |
| DRAWN      | RF       |  |                |
| CHECKED    | BC       | DRAWING NO.  | REV. E         |
| MFG. APPR. | BC       | <b>D4635</b>   | SHEET 16 OF 18 |
| APPROVED   | BC       | TITLE  | SCALE          |
| DE APPR.   | BC       | <b>OUTBOARD CEILING PANELS</b>   | NTS            |
| DATE       | 14.01.09 | <small>COPYRIGHT © 2012 BY DART AEROSPACE LTD<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |                |



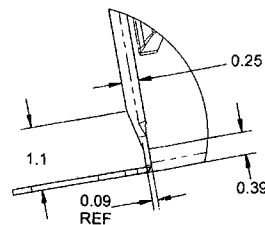
**SECTION A-A**  
SECTION A-A' OPPOSITE  
SCALE 2X



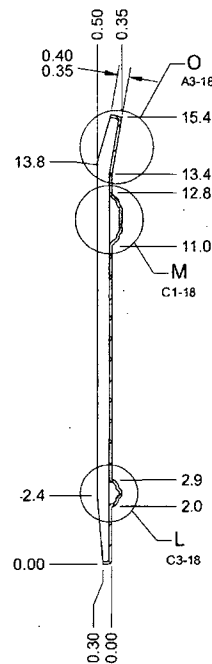
**AUXILIARY VIEW R-R**  
SECTION R-R' OPPOSITE  
SCALE 2X



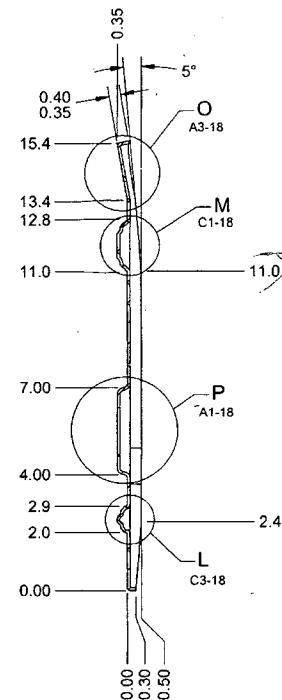
**SECTION B-B**  
SCALE 2X



**AUXILIARY VIEW S-S**  
SECTION S-S' OPPOSITE  
SCALE 2X



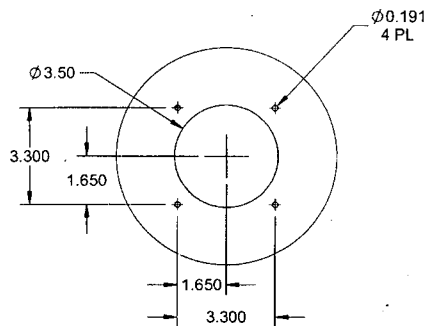
**SECTION G-G**  
SCALE 2X



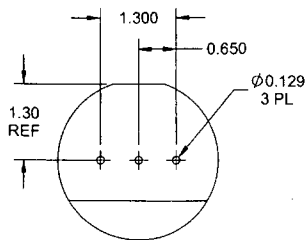
**SECTION K-K**  
SCALE 2X

RELEASED  
2014-01-22

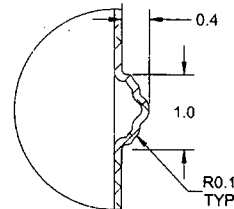
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|------------|----------|---|----------------|
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| DRAWN      | RF       |   |                |
| CHECKED    | PC       | DRAWING NO.   | REV. E         |
| MFG. APPR. | PC       | D4635   | SHEET 17 OF 18 |
| APPROVED   | PC       | TITLE   | SCALE          |
| DE APPR.   | PC       | OUTBOARD CEILING PANELS   | NTS            |
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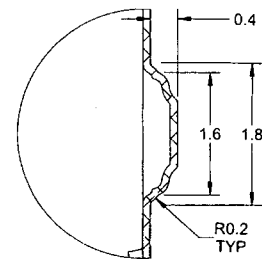
**DETAIL D**  
SCALE 2X  
B4-13  
B3-14  
B5-15  
B5-16



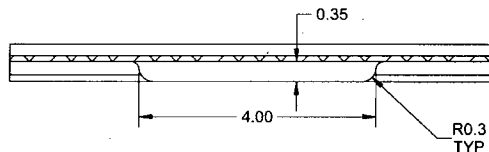
**DETAIL E**  
SCALE 4X  
C7-13  
B6-14  
C6-15  
B5-16



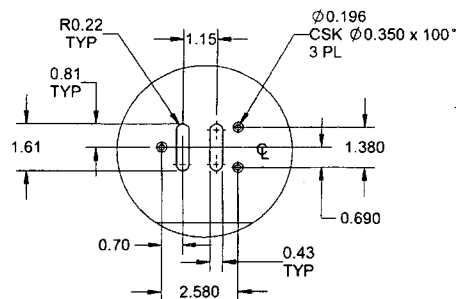
**DETAIL L**  
SCALE 1.5X  
B2-17  
B4-17  
C5-17  
C7-17



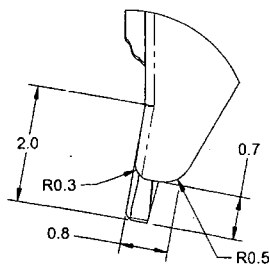
**DETAIL M**  
SCALE 1.5X  
C2-17  
C3-17  
C5-17  
C7-17



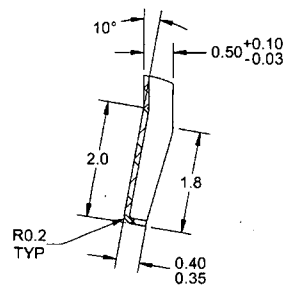
**SECTION I-I**  
SCALE 4X  
B5-16



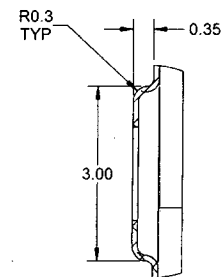
**DETAIL Q**  
SCALE 2X  
C5-16



**DETAIL N**  
SCALE 2X  
B2-13



**DETAIL O**  
SCALE 2X  
D2-17  
D3-17  
B5-17



**DETAIL P**  
SCALE 4X  
C2-17

RELEASED  
2014-01-22

|            |          |  |                |
|------------|----------|--|----------------|
| DESIGN     | RF       | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA   |                |
| DRAWN      | RF       |  |                |
| CHECKED    | PC       | DRAWING NO.  | REV. E         |
| MFG. APPR. | PC       | D4635  | SHEET 18 OF 18 |
| APPROVED   | PC       | TITLE  | SCALE          |
| DE APPR.   | PC       | OUTBOARD CEILING PANELS  | NTS            |
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|                                   |      |                      |
|-----------------------------------|------|----------------------|
| Description: Aft Ceiling Panel RW |      | Work Order: 114780   |
| Inspection Drawing: 4635-4        | Rev: | Part Number: D4635-4 |

# INSPECTION SHEET

[illegible]

|                         |  |  |                                      |
|-------------------------|--|--|--------------------------------------|
| Measured by: <b>SAD</b> | Checked By: <b>DAS</b><br><b>16</b><br><b>9-89</b> | QC inspector: <b>DAS</b><br><b>16</b><br><b>9-89</b> | Engineering Approval (if necessary): |
| Date <b>14/05/01</b>    | Date <b>14/05/01</b>                               | Date <b>14/05/01</b>                                 | Date                                 |